

**ABSTRACT**  
**For**

**A METHOD FOR A SECURE DETACH PROCEDURE IN A RADIO  
TELECOMMUNICATION NETWORK**

The present invention proposes a method for performing a detach of a terminal (MS) registered to a telecommunication network (NW) by associating an identification (TMSI) for said terminal (MS), deriving a signature (TMSI\_SIG) for said identification (TMSI), and allocating a pair consisting of said identification (TMSI) and said signature (TMSI\_SIG) to said terminal (MS), said method comprising the steps of: sending a detach request (DET\_REQ) including said identification (TMSI) and said identification signature (TMSI\_SIG) from said registered terminal (MS) to said network (NW); receiving said detach request (DET\_REQ) at the network (NW) side; comparing said received detach request (DET\_REQ) with a record of registration data of said terminal (MS) kept at the network side; and detaching said terminal (MS) from said network (NW), if said received detach request (DET\_REQ) coincides with said record of registration data. Also, the present invention relates to a corresponding registration method and proposes a new format for a detach request message transmitted from a mobile station (MS) as a terminal to a network (NW) controlling device like an MSC, and also relates to correspondingly adapted devices.

09537504-07500